

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/40, C07K 14/18, C12Q 1/70, C07K 16/10, G01N 33/576		A2	(11) International Publication Number: WO 96/13590 (43) International Publication Date: 9 May 1996 (09.05.96)
(21) International Application Number: PCT/EP95/04155			
(22) International Filing Date: 23 October 1995 (23.10.95)			
(30) Priority Data: 94870166.9 21 October 1994 (21.10.94) EP (34) Countries for which the regional or international application was filed: AT et al. 95870076.7 28 June 1995 (28.06.95) EP (34) Countries for which the regional or international application was filed: AT et al.		(81) Designated States: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, LS, MW, SD, SZ, UG).	
(71) Applicant (for all designated States except US): INNOGENET- ICS N.V. [BE/BE]; Industriepark Zwijnaarde 7, Box 4, B- 9052 Zwijnaarde (BE).		Published <i>Without international search report and to be republished upon receipt of that report.</i> <i>With a request for rectification under Rule 91.1(f).</i>	
(72) Inventors; and (75) Inventors/Applicants (for US only): MAERTENS, Geert [BE/BE]; Zilversparrenstraat 64, B-8310 Brugge (BE). STUYVER, Lieven [BE/BE]; Holestraat 8, B-2400 Mol (BE).			
(74) Common Representative: INNOGENETICS N.V.; Mrs. Ann De Clercq, Industriepark Zwijnaarde 7, Box 4, B-9052 Zwijnaarde (BE).			

(54) Title: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC AGENTS

(57) Abstract

The present invention relates to new genomic nucleotide sequences and amino acid sequences corresponding to the coding region of these genomes. The invention relates to new HCV types and subtypes sequences which are different from the known HCV types and subtypes sequences. More particularly, the present invention relates to new HCV type 7 sequences, new HCV type 9 sequences, new HCV type 10 and new HCV type 11 sequences. Also, the present invention relates to new HCV type 1 sequences of subtypes 1d, 1e, 1f and 1g; new HCV type 2 sequences of subtypes 2e, 2f, 2g, 2h, 2i, 2k and 2l; new HCV type 3 sequences of subtype 3g, new HCV type 4 sequences of subtypes 4k, 4l and 4m; a process for preparing them, and their use for diagnosis, prophylaxis and therapy. More particularly, the present invention provides new type-specific sequences of the Core, the E1 and the NS5 regions of new HCV types 7, 9, 10 and 11, as well as of new variants (subtypes) of HCV types 1, 2, 3 and 4. These new HCV sequences are useful to diagnose the presence of HCV in a biological sample. Moreover, the availability of these new type-specific sequences can increase the overall sensitivity of HCV detection and should also prove to be useful for prophylactic and therapeutic purposes.